

10/528047

DT15 Re PCT/PTO 16 MAR 2005

DOCKET NO.: 267968US3PCT

(#2)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: Ted DIMITROFF  
SERIAL NO.: NEW U.S. PCT APPLICATION  
FILED: HEREWITH  
INTERNATIONAL APPLICATION NO.: PCT/EP03/10474  
INTERNATIONAL FILING DATE: September 19, 2003  
FOR: PITCH SENSING IN DRILLING MACHINES

**REQUEST FOR PRIORITY UNDER 35 U.S.C. 119**  
**AND THE INTERNATIONAL CONVENTION**

Commissioner for Patents  
Alexandria, Virginia 22313

Sir:

In the matter of the above-identified application for patent, notice is hereby given that the applicant claims as priority:

<b><u>COUNTRY</u></b>	<b><u>APPLICATION NO</u></b>	<b><u>DAY/MONTH/YEAR</u></b>
Great Britain	0221717.2	19 September 2002

Certified copies of the corresponding Convention application(s) were submitted to the International Bureau in PCT Application No. PCT/EP03/10474. Receipt of the certified copy(s) by the International Bureau in a timely manner under PCT Rule 17.1(a) has been acknowledged as evidenced by the attached PCT/IB/304.

Respectfully submitted,  
OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

*Surinder Sachar*

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(OSMMN 08/03)



10/528 047  
Rec'd PCT/PTO 16 MAR 2005  
The Patent Office  
Concept House  
Cardiff Road INVESTOR IN PEOPLE  
Newport  
South Wales  
NP10 8QQ

#2

REC'D 01 MAR 2004	
WIPO	PCT

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

I also certify that the attached copy of the request for grant of a Patent (Form 1/77) bears an amendment, effected by this office, following a request by the applicant and agreed to by the Comptroller-General.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

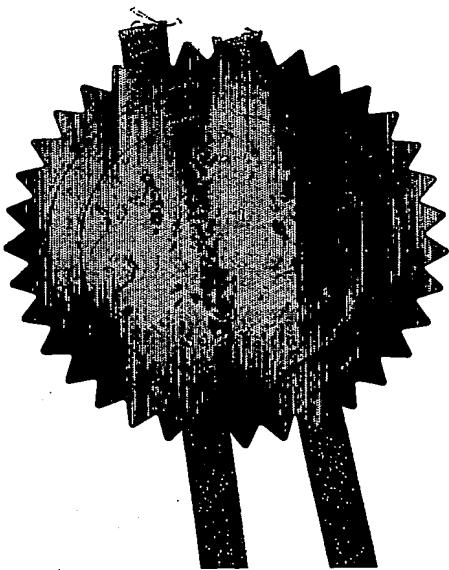
In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

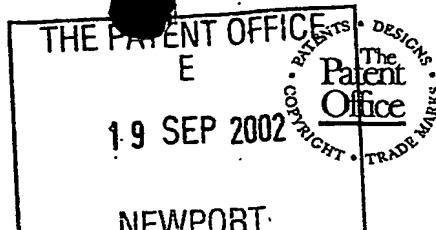
Signed

*Hebeher*

Dated 1 October 2003



**PRIORITY  
DOCUMENT**  
SUBMITTED OR TRANSMITTED IN  
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19 SEP 2002 1749401-1 002969  
19 SEP 2002 0420-02217-2  
19 SEP 2002 0420-02217-2

NEWPORT

**Request for grant of a patent**

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
South Wales  
NP10 8QQ

1. Your reference

GRC 5618

2. Patent application number  
(The Patent Office will fill in this part)

0221717.2

19 SEP 2002

3. Full name, address and postcode of the or of each applicant (*underline all surnames*)

Lattice Intellectual Property Ltd  
130 Jermyn Street, London,  
SW1Y 4UR

Patents ADP number (*if you know it*)

England &amp; Wales

08059768001

If the applicant is a corporate body, give the country/state of its incorporation

4. Title of the invention

Tool for directional boring

5. Name of your agent (*if you have one*)

William Illingworth-Law  
Lattice Intellectual Property Ltd  
23 Buckingham Gate, London,  
SW1E 6LB

*Hammonds  
Butland House  
148 Edmund Street  
Birmingham  
B3 2EE*

57/77

*08059768001  
08622680001*

Patents ADP number (*if you know it*)6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (*if you know it*) the or each application number

Country

Priority application number  
(*if you know it*)Date of filing  
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing  
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (*Answer 'Yes' if:*

- a) *any applicant named in part 3 is not an Inventor, or*
- b) *there is an Inventor who is not named as an applicant, or*
- c) *any named applicant is a corporate body.*

*See note (d))*

yes

Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form.  
Do not count copies of the same document

Continuation sheets of this form

Description	1
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Claim(s)	1
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Abstract	1
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Drawing(s)	1
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10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*)

Request for preliminary examination and search (*Patents Form 9/77*)

Request for substantive examination  
(*Patents Form 10/77*)

Any other documents  
(please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature

Date

18/9/02

William Illingworth

12. Name and daytime telephone number of person to contact in the United Kingdom

William Illingworth-Law 020 7963 6818

Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

- a) If you need help to fill in this form or you have any questions, please contact the Patent Office on 08459 500505.
- b) Write your answers in capital letters using black ink or you may type them.
- c) If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- d) If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- e) Once you have filled in the form you must remember to sign and date it.
- f) For details of the fee and ways to pay please contact the Patent Office.

September 14, 2002

**Pitch/Percent of Grade Tool Patent for Directional Boring Sanitary Sewers.**

Having the ability to monitor the percent of grade while the guide head is rotating.

There is no known tool available to allow monitoring of the percent of grade while the guide head is rotating during the directional boring procedure. Existing tools require the operator to stop and check percent of grade. This tool will allow for a more accurate reading away from the guide head. Some existing tools may have a good pitch reading, but once they are installed into the beacon housing the pitch reading changes.

The tool listed below is one of many configurations, but this one would become the most common.

**1. The Tool:**

- a. The tool would consist of a pitch sensor fixed solid into the tool and set to a perfect zero percent at the manufacture.
- b. The tool would have a separate area away from the pitch sensor to house the power supply. (battery)
- c. The tool can be made to fit duel stem and single stem directional boring machines.
- d. Duel stem tooling will connect to a none rotating stem allowing a reading based on the location of the none rotating outer stem.
- e. Single stem tool will connect to the single stem and rotate with the sensor fixed solid into the tool.

**Invention Notes:**

1. The pitch sensor will be set solid into the tool with a shock absorbing material.
2. If the tool fails it will need to be returned to the manufacture for repair.

**Closing Notes:**

1. The important part of the tool is having the ability to set the pitch sensor into a tool with a perfect zero.